

**What is claimed is:**

1. A computer system data restoring device is comprised of:
  - a casing;
  - a plurality of function keys disposed on the casing;
  - 5 a circuit device disposed in the casing, and having a central processing unit (CPU), a connection port, a memory, a connection interface, a controller integrated circuit, a data storage device; wherein:
    - the circuit device is electrically connected with the function keys, and
    - 10 is connected to an external computer host via the connection port for controlling the function keys that further control operations of the controller integrated circuit, thereby activating corresponding software in the computer host via the CPU and the connection port to store the computer host data into the restoring device, or to restore
    - 15 the computer system data stored in the restoring device to the external computer host.
2. The computer system data restoring device in accordance with claim 1, wherein the function keys include a quick backup key, a complete backup key and a restoring key.
- 20 3. The computer system data restoring device in accordance with claim

1, wherein the connection port connected to the CPU is a universal serial bus (USB) interface, a 1394 serial interface, or a super advance technology attachment / advance technology attachment packet interface (ATA/ATAPI) interface.

5 4. The computer system data restoring device in accordance with claim 1, wherein the data storage device has an ATA/ATAPI interface.

5. The computer system data restoring device in accordance with claim 1, wherein the data storage device is a hard disk, a memory card, or a compact disk burner.

10 6. A circuit device of a computer system data restoring device comprising a CPU, a connection port, a memory, a connection interface, a controller integrated circuit, and a data storage device; wherein:

the circuit device is electrically connected with the function keys, and  
15 is connected to an external computer host via the connection port for controlling the function keys that further control operations of the controller integrated circuit, thereby storing activating corresponding software in the computer host via the CPU and the connection port to store the computer host data into the restoring device, or to restore  
20 the computer system data stored in the restoring device to the

external computer host.

7. A method for restoring computer system data comprising the steps of:

- a) Preparing a restoring device for connecting with a computer host,  
wherein the restoring device is consisted of a casing, and  
5 function keys including a quick backup key, a complete backup  
key and a restoring key;
- b) Powering on for enabling the computer host to enter operating  
mode;
- c) The computer host operating at operation system (OS), and a  
10 system thereof proceeding with normal operations;
- d) Determining whether or not to proceed with installation and  
execution of application software of the restoring device;
- e) If yes, placing in a compact disk with execution of the application  
software of the restoring device;
- 15 f) Automatic installing and executing the application software of the  
restoring device to compress and store all hard disk data into the  
default system data restoring file of the restoring device;
- g) Shutting down;
- h) Determining whether the function keys of the restoring device are  
20 pressed if the computer host already has the application software

for executing the computer system data restoring device;

- i) Terminating operations if no function keys are pressed, and returning to step c, or shutting down as step g;
- j) Determining whether the quick backup key is pressed;
- 5 k) If yes, checking differences between last execution of quick backup and the present time, or between first execution of quick backup and the default system data backup file, and store the differences to the restoring device; or if not, returning to step c;
- l) Determining whether the complete backup key is pressed;
- 10 m) If yes, checking differences between all data and the default system data file, and storing the differences into a storage equipment of the restoring device to replace the original complete backup, deleting the original quick backup file, and returning to step c;
- 15 n) Determining whether the restoring key is pressed if the complete backup key is not pressed;
- o) If yes, displaying various restoring points of the selection table on the monitor for selections of a user; if not, returning to step c;
- p) Determining whether the restoring point selected by the user is
- 20 the default system data;

- q) If yes, executing the default system data installed and stored in the restoring device to restore the computer host system, and returning to step c when having completed the execution;
- 5 r) If not, determining whether the restoring point selected by the user is a first restoring point;
- s) If yes, executing a difference file and the default system data file stored by the complete backup in the restoring device to restore the computer host system, and returning to step c after having completed the execution;
- 10 t) If not, determining whether the restoring point selected by the user is the second restoring point;
- u) If yes, according to the time of restoring point selected, executing the difference file and the default system data file stored by the quick backup in the restoring device to restore the computer host system, and returning to step c after having completed the execution;
- 15 v) If not, determining whether the restoring point selected by the user is the third restoring point; and
- w) If yes, according to the time of restoring point selected, executing the difference file and the default system data file stored by the
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quick backup in the restoring device to restore the computer host system, and returning to step c after having completed the execution; and

x) If not, returning to step c.

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